

DPM 5073

MONSANTO PRODUCT NAME  
**MCS-352 HYDRAULIC  
 ASSEMBLY LUBRICANT**

MONSANTO COMPANY  
 800 N. LINDBERGH BLVD.  
 ST. LOUIS, MO 63167

**Emergency Phone No.**  
**(Call Collect)**  
**314-694-1000**

## PRODUCT IDENTIFICATION

**CAS No.:** MCS-352 lubricant is a proprietary mixture of components. It has no CAS number. All components appear on the inventory of chemical substances published by the U.S. Environmental Protection Agency.

**Chemical Family:** Phosphate ester

**DOT Hazard Class:** Product is not classified as a hazardous material by the U.S. Department of Transportation.

**DOT Label Requirement:** Product Label

**Reportable Quantity (RQ)  
 Under U.S. Clean Water  
 Act Regulations:** Not Listed

## WARNING STATEMENTS

CAUTION!  
 MAY CAUSE IRRITATION TO EYES AND SKIN

## PRECAUTIONARY MEASURES

Avoid prolonged or repeated skin contact. Wear impervious gloves  
 Do not get in eyes. Wear chemical safety goggles.

## EMERGENCY AND FIRST AID PROCEDURES

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Call a physician.

IF ON SKIN, immediately flush with plenty of water. Wash skin thoroughly with soap and water. Remove contaminated clothing. Wash clothing before reuse.

## OCCUPATIONAL CONTROL PROCEDURES

**Eye Protection:** Wear chemical safety goggles to prevent eye contact.

**Skin Protection:** Wear protective gloves to minimize skin contact.

**Respiratory Protection:** Use NIOSH approved equipment with full facepiece when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application.

**Ventilation:** Provide ventilation to minimize exposure. Local exhaust ventilation preferred.

(Occupational Control Procedures Continued On Next Page)

MATERIAL SAFETY DATA

MCS-352 Hydraulic Assembly Lubricant

## OCCUPATIONAL CONTROL PROCEDURES (Continued)

### Airborne

**Exposure Limits:** No permissible exposure limit or threshold limit value has been established by OSHA or the ACGIH for MCS-352 Hydraulic Assembly Lubricant.

Contains: Tributyl Phosphate (CAS No. 126-73-8)

OSHA PEL/TWA: 5 mg/m<sup>3</sup> (0.4 ppm)  
ACGIH TLV®/TWA: 2.5 mg/m<sup>3</sup> (0.2ppm)  
ACGIH TLV/STEL: 5 mg/m<sup>3</sup> (0.4 ppm)

## FIRE PROTECTION INFORMATION

**Flash Point:** >350°F **Method:** Cleveland Open Cup

**Extinguishing Media:** Dry powder, carbon dioxide, chemical foams, and water fog.

**Special Firefighting Procedures:** When fighting any chemical fire, firefighters should wear full protective clothing and self-contained breathing apparatus.

**Unusual Hazards:** Oxides of phosphorus may be produced in fires along with carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), soot, smoke, and hydrocarbons.

## REACTIVITY DATA

**Hazardous Decomposition Products:** Oxides of phosphorus may be produced in fires along with CO, CO<sub>2</sub>, soot, smoke, and hydrocarbons.

**Hazardous Polymerization:** Does not occur.

## PHYSIOLOGICAL EFFECTS SUMMARY

Oral LD<sub>50</sub> (Rat): 4,307 mg/kg, Slightly Toxic  
Dermal LD<sub>50</sub> (Rabbit) : >2,000 mg/kg, Slightly Toxic  
Eye Irritation (Rabbit) : (Avg. Max.) 2.6 on a scale of 110.0, Slightly Irritating  
Skin Irritation (Rabbit) : (Avg. Max.) 0.4 on a scale of 8.0, Practically Nonirritating  
Aerosol Inhalation (Rat) : 0 out of 10 rats died when exposed to nominal concentration of 4.15 mg/l air of a minor component of this material for 4 hours.

## PHYSICAL DATA

**Appearance:** Very viscous purple oil  
**Boiling Point @ 760 mm Hg:** 350°C (with decomposition)  
**Pour Point:** 20°F  
**Specific Gravity @ 25/25°C:** 1.02  
**Viscosity @ 210°F:** 190-225 centistokes

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## SPILL, LEAK & DISPOSAL INFORMATION

**Waste Disposal:** Waste product should be incinerated or disposed of in a hazardous waste landfill which complies with local, state, and federal regulations.

**Spill or Leakage Procedures:** Spills should be absorbed on a suitable medium such as sawdust, clay or filtercel.

This material should not be dumped, spilled, rinsed, or washed into sewers or public waterways.

**DATE:** 12/19/83  
**MSDS NO.:** M00006601

**REVISED:**

**SUPERSEDES:**

FOR ADDITIONAL NON-EMERGENCY INFORMATION, CONTACT:

Monsanto Company  
800 N. Lindbergh Blvd.  
St. Louis, MO 63167  
314-694-1000

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